

DIALOG(R)File 351:Derwent WPI
(c) 2004 Thomson Derwent. All rts. reserv.

007388666

WPI Acc No: 1988-022601/*198804*

**Pharmaceutical with stabilised granulocytes colony stimulating factor -
contains surfactant, saccharide, protein or high mol. wt. cpd. as
stabiliser**

Patent Assignee: CHUGAI SEIYAKU KK (CHUS); SHONAN KIKO KK (SHON-N);

CHUGAI PHARM CO LTD (CHUS)

Inventor: MACHIDA M M; MACHIDA M

Number of Countries: 023 Number of Patents: 036

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 3723781	A	19880121	DE 3723781	A	19870717	198804	B
GB 2193631	A	19880217	GB 8716904	A	19870717	198807	
FR 2601591	A	19880122	FR 8710156	A	19870717	198811	
NL 8701640	A	19880216	NL 871640	A	19870713	198811	
AU 8775665	A	19880121				198812	
NO 8702966	A	19880215				198812	
SE 8702907	A	19880119				198812	
DK 8703683	A	19880119				198815	
ZA 8705268	A	19880127	ZA 875268	A	19870717	198818	
HU 44941	T	19880530				198825	
JP 63146826	A	19880618	JP 87178031	A	19870716	198830	
JP 63146827	A	19880618	JP 87178032	A	19870716	198830	
JP 63146828	A	19880618	JP 87178034	A	19870716	198830	
JP 63152326	A	19880624	JP 87178033	A	19870716	198831	
PT 85343	A	19880729				198835	
BE 1000253	A	19880927	BE 88787	A	19880927	198840	
CN 8704963	A	19880224				198915	
CH 671157	A	19890815				198937	
ES 2010226	A	19891101	ES 872106	A	19870717	199004	
GB 2193631	B	19901121				199047	
IT 1218927	B	19900424				199211	
CA 1297007	C	19920310				199216	
NO 171828	B	19930201	NO 872966	A	19870716	199310	
IL 83220	A	19930131	IL 83220	A	19870717	199311	
KR 9304597	B1	19930601	KR 877804	A	19870718	199423	
RU 2025120	C1	19941230	SU 4203033	A	19870717	199531	
SE 503312	C2	19960513	SE 872907	A	19870717	199625	
AT 8701775	A	19960815	AT 871775	A	19870714	199637	
DK 171308	B	19960902	DK 873683	A	19870715	199641	
JP 2577742	B2	19970205	JP 87178031	A	19870716	199710	
JP 2577743	B2	19970205	JP 87178032	A	19870716	199710	
AT 402259	B	19970215	AT 871775	A	19870714	199713	
JP 2629000	B2	19970709	JP 87178033	A	19870716	199732	
NL 192917	B	19980105	NL 871640	A	19870713	199807	
PH 28830	A	19950314	PH 35555	A	19870717	199844	
DE 3723781	C2	19990902	DE 3723781	A	19870717	199939	

Priority Applications (No Type Date): JP 86169489 A 19860718; JP 86169486 A
19860718; JP 86169487 A 19860718; JP 86169488 A 19860718; JP 87178031 A
19870716; JP 87178032 A 19870716; JP 87178033 A 19870716

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 3723781	A		9		

NO 171828	B	A61K-037/02	Previous Publ. patent NO 8702966
RU 2025120	C1	10 A61K-009/14	
DK 171308	B	A61K-038/18	Previous Publ. patent DK 8703683
JP 2577742	B2	6 A61K-038/00	Previous Publ. patent JP 63146826
JP 2577743	B2	6 A61K-038/00	Previous Publ. patent JP 63146827
AT 402259	B	A61K-038/19	Previous Publ. patent AT 8701775
JP 2629000	B2	5 A61K-038/00	Previous Publ. patent JP 63152326
NL 192917	B	11 A61K-047/00	
IL 83220	A	A61K-037/02	
KR 9304597	B1	A61K-037/02	
SE 503312	C2	A61K-038/19	
AT 8701775	A	A61K-038/19	
PH 28830	A	A61K-031/715	
DE 3723781	C2	A61K-038/16	

Abstract (Basic): DE 3723781 A

A pharmaceutical contains stabilised G-CSF (granulocytes colony stimulating factor) as active ingredient and at least one surfactant, saccharide, protein or a high mol. wt. cpd. Pref. the amt. of surfactant or saccharide is 1-10000 pts. wt. Pref. pt. wt. G-CSF. Pref. the surfactant is non-ionic (esp. a sorbitan ester glycerine ester, poly-glycerine ester, polyoxyethylene sorbital ester, polyoxyethylene-glycerine ester or polyethylene glycol ester of an aliphatic acid, polyoxyethylene polyoxypropylene alkyl ether, a hardened polyoxyethylated castor oil, a polyoxyethylated bees wax deriv. a polyoxyethylene lanoline deriv. or an aliphatic polyoxyethylene acid aride), anionic (esp. an alkylsulphate or alkylsulpho succinyl ester salt) or natural (esp. lecithin, sphingophospholipid or an ester of an aliphatic acid with sucrose.

USE/ADVANTAGE - G-CSF can be used to treat various infectious diseases, but is unstable and highly sensitive to changes in the environment e.g. temp., humidity, oxygen or UV light. The invention stabilises the G-CSF and protects it completely against loss of activity.

Abstract (Equivalent): GB 2193631 B

A stable granulocyte colony stimulating factor containing pharmaceutical preparation that contains, in addition to the granulocyte colony stimulating factor present as the effective ingredient, at least one substance selected from pharmaceutically acceptable surfactants, saccharides, proteins and other high-molecular weight compounds such as natural polymers or synthetic polymers; wherein the granulocyte colony stimulating factor has the following physicochemical properties: (i) molecular weight: about 19,000 +/- 1,000 as measured by electrophoresis through a sodium dodecylsulfate-polyacrylamide gel; (ii) isoelectric point: having at least one of the three isoelectric points, pI = 5.5 +/- 0.1, pI = 5.8 +/- 0.1, and pI = 6.1 +/- 0.1; (iii) ultraviolet absorption: having a maximum absorption at 280 nm and a minimum absorption at 250 nm; (iv) amino acid sequence of the 21 residues from N terminus: H2N-Thr-Pro-Leu-Gly -Pro-Ala-Ser-Ser -Leu-Pro-Gln-Ser-Phe-Leu -Leu-Lys-Cys-Leu- Glu-Gln-Val-.

Derwent Class: A96; B04

International Patent Class (Main): A61K-009/14; A61K-031/715; A61K-037/02; A61K-038/00; A61K-038/16; A61K-038/18; A61K-038/19; A61K-047/00

International Patent Class (Additional): A61K-009/08; A61K-031/70; A61K-035/00; A61K-037/00; A61K-037/04; A61K-037/12; A61K-037/43; A61K-038/17; A61K-045/05; A61K-047/10; A61K-047/14; A61K-047/20;

A61K-047/24; A61K-047/26; A61K-047/32; A61K-047/34; A61K-047/36;
A61K-047/42; C12N-000/00